WHAT IS CLAIMED IS:

1. A backplane, comprising:

a front side portion having a plurality of front connector holes organized into a set of front connector segments; and

a rear side portion having a plurality of rear connector holes organized into a set of rear connector segments that correspond to said front connector segments,

wherein front connector holes of at least one front connector segment and rear connector holes of a rear connector segment that corresponds to said at least one front connector segment are dimensioned such that said at least one front connector segment and corresponding rear connector segment are electrically separated, whereby said at least one front connector segment and said corresponding rear connector segment are operable to support independent signal pathways.

2. The backplane as set forth in claim 1, wherein said set of front connector segments and said set of rear connector segments comprise five connector segments each, said connector segments conforming to the Compact Peripheral Component Interconnect (CPCI) standard.

3. The backplane as set forth in claim 1, wherein one of said independent signal pathways comprises a proprietary input/output (I/O) bus system.

4. The backplane as set forth in claim 1, wherein connector holes of said at least one front connector segment and said corresponding rear connector segment are physically separated.

5. The backplane as set forth in claim 1, wherein two front connector segments and corresponding rear connector segments are physically separated.

6. The backplane as set forth in claim 5, wherein said two front connector segments are operable to carry CPCI-compliant signals.

7. The backplane as set forth in claim 5, wherein said corresponding rear connector segments are operable to carry at least one user-defined signal.

8. The backplane as set forth in claim 1, wherein said set of front connector segments and said set of rear connector segments conform to one of the VME standard.

9. The backplane as set forth in claim 1, wherein said set of front connector segments and said set of rear connector segments conform to the MultiBus standard.

10. A method for introducing user-defined signals into a Compact Peripheral Component Interconnect (CPCI)-compliant backplane, comprising the steps:

providing a front side portion of said backplane with a plurality of front connector holes that are organized into a set of front connector segments;

providing a rear side portion of said backplane with a plurality of rear connector holes that are organized into a set of rear connector segments that correspond to said front connector segments; and

providing an electrical separation between front connector holes of at least one front connector segment and rear connector holes of a rear connector segment that corresponds to said at least one front connector segment, whereby said at least one front connector segment is operable to support a CPCI-compliant bus for carrying CPCI signals and said corresponding rear connector segment is operable to support an independent signal pathway for carrying at least one user-defined signal.

11. The method for introducing user-defined signals into a CPCI-compliant backplane as set forth in claim 10, wherein said electrical separation is effectuated by way of disposing a predetermined physical separation between said front connector holes of said at least one from connector segment and said rear connector holes of said corresponding rear connector segment.

12. The method for introducing user-defined signals into a CPCI-compliant backplane as set forth in claim 10, said wherein at least one user-defined signal comprises a Super Frame Indicator (SFI) signal operable to control the operation of a telecommunications rack in which said backplane is deployed.

13. The method for introducing user-defined signals into a CPCI-compliant backplane as set forth in claim 10, said at least one user-defined signal comprises an Extended Alarm Signal (EAS) operable to carry a plurality of alarms generated in the operation of a telecommunications rack in which said backplane is deployed.

14. A connector system, comprising:

a Compact Peripheral Component Interconnect (CPCI)-compliant backplane having a plurality of slots, each slot including five front side connector segments (denoted herein as P1 through P5) and five rear side connector segments (denoted herein as rP1 through rP5) that correspond to said front side connector segments, wherein connector holes forming said P1 and P2 connector segments are electrically separated from connector holes forming said rP1 and rP2 connector segments;

a front side card coupled to said backplane at a particular slot, said front side card operating to carry a plurality of CPCI signals via a front side backplane bus formed to couple said P1 and P2 connector segments of said slots; and

a rear side card coupled to said backplane at said particular slot's rear side connector segments, said rear side card operating to carry at least one user-defined signal via a rear side backplane bus formed to couple said rP1 and rP2 segments of said slots.

15. The connector system as set forth in claim 14, wherein said at least one user-defined signal is provided from said rear side card to said front side card via a coupling from between said P3 and rP3 connector segments.

16. The connector system as set forth in claim 14, wherein said at least one user-defined signal is provided from said rear side card to said front side card via a coupling from between said P4 and rP4 connector segments.

17. The connector system as set forth in claim 14, wherein said at least one user-defined signal is provided from said rear side card to said front side card via a coupling from between said P5 and rP5 connector segments.

18. The connector system as set forth in claim 14, wherein said at least one user-defined signal comprises a Super Frame Indicator (SFI) signal operable to control the operation of a telecommunications rack in which said backplane is deployed.

19. The connector system as set forth in claim 14, wherein said at least one user-defined signal comprises an Extended Alarm Signal (EAS) operable to carry a plurality of alarms generated in the operation of a telecommunications rack in which said backplane is deployed.

20. The connector system as set forth in claim 14, wherein said P1 and P2 connector segments are formed as a monoblock.

21. The connector system as set forth in claim 14, wherein said P4 and P5 connector segments are formed as a monoblock.

22. The connector system as set forth in claim 14, wherein said connector holes forming said P1 and P2 connector segments are dimensioned to receive ultrashort press-in pins formed at a corresponding connector portion of said front side card.

23. The connector system as set forth in claim 22, wherein said connector holes forming said rP1 and rP2 connector segments are dimensioned to receive ultrashort press-in pins formed at a corresponding connector portion of said rear side card.

24. The connector system as set forth in claim 14, wherein an insulating layer is disposed between said connector holes forming said P1 and P2 connector segments and said connector holes forming said rP1 and rP2 connector segments.

25. The connector system as set forth in claim 14, wherein a physical separation of a predetermined distance is disposed between said connector holes forming said P1 and P2 connector segments and said connector holes forming said rP1 and rP2 connector segments.